

DEPARTMENT OF TRANSPORTATION

Research and Special Programs  
Administration

49 CFR Part 171

[Docket Nos. HM-181, HM-181A, HM-181B,  
HM-181C, HM-181D, HM-204 and HM 142A;  
Amdt. No. 171-111]

RIN 2137-AA01, 2137-AB87, 2137-AB88,  
2137-AA10, 2137-AB90, and 2137-AB56

Performance-Oriented Packaging  
Standards; Revisions to Transitional  
Provisions

**AGENCY:** Research and Special Programs  
Administration (RSPA), DOT.

**ACTION:** Final rule; partial response to  
petitions for reconsideration and  
revisions.

**SUMMARY:** This amendment makes revisions to a final rule published in the Federal Register under Docket Nos. HM-181, HM-181A, HM-181B, HM-181C, HM-181D and HM-204 (55 FR 52402, December 21, 1990). That final rule comprehensively revised the Hazardous Materials Regulations (HMR; 49 CFR parts 171-180) with respect to hazard communication, classification and packaging requirements. The changes were based on the United Nations Recommendations on the Transport of Dangerous Goods (UN Recommendations) and RSPA's own initiative. The revisions contained in this document are in response to petitions for reconsideration addressing the transitional provisions contained in the final rule. This amendment also extends the effective date for certain quantities of infectious substances and incorporates all rulemaking actions issued under Docket HM-142A (56 FR 197, January 3, 1991, and 56 FR 7312, February 22, 1991) into Docket HM-181. RSPA will respond to other petitions for reconsideration in a forthcoming corrections document. The revision of the transition period will allow adequate time for persons subject to the HMR to evaluate domestic products for changes in classification, descriptions on shipping papers, product marking, labeling and vehicle placarding, to conduct package testing, and to provide sufficient time for the retraining of shipper, carrier, enforcement, and emergency response personnel in the new requirements.

**DATES:** *Effective:* October 1, 1991.

*Applicability:* The provisions of § 172.101(l)(1)(ii), which allow up to one year after a change in the Hazardous Materials Table (HMT) to use up stocks of preprinted shipping papers and to

ship packages that were marked prior to the change, do not apply to § 171.14.

**FOR FURTHER INFORMATION CONTACT:** Delmer Billings, telephone (202) 366-4488, Office of Hazardous Materials Standards, or Charles Hochman, telephone (202) 366-4545, Office of Hazardous Materials Technology, U.S. Department of Transportation, 400 Seventh Street SW., Washington, DC 20590-0001.

**SUPPLEMENTARY INFORMATION:** On December 21, 1990, the Research and Special Programs Administration (RSPA) published a final rule under Docket HM-181 which comprehensively revised the Hazardous Materials Regulations (HMR; 49 CFR, parts 171 to 180) with respect to hazard communication, classification, and packaging requirements based on the Sixth Edition of the United Nations Recommendations on the Transport of Dangerous Goods (UN Recommendations). RSPA received over 250 petitions for reconsideration, some of which are addressed herein. RSPA's response to other petitions for reconsideration will appear in one or more additional corrections to the December 21, 1990 final rule, which are expected to be issued very soon.

Because the final rule was so extensive, RSPA established several transition periods, extending up to five years, until October 1, 1996, for implementation of the new requirements. Based on petitions for reconsideration, RSPA is revising these transitional periods in this rulemaking to provide persons subject to the HMR adequate time to evaluate domestic products for changes in classification, descriptions on shipping papers, product marking, labeling and vehicle placarding, to conduct package testing, and to provide sufficient time for the retraining of shipper, carrier, enforcement, and emergency response personnel in the new requirements.

#### Discussion of Petitions

RSPA received twenty-five petitions recommending revisions to the transitional provisions contained in § 171.14 for converting to the new classification and hazard communication system. Most of the petitioners recommended either extension or elimination of the two-year hazard communication transition period provided in § 171.14(b)(3). Seven petitioners urged RSPA to extend the period for classifying, describing, marking, labeling, and placarding materials poisonous by inhalation to October 1, 1992, or October 1, 1993.

#### *Hazard Communication and Classification Transition Period*

Provisions in § 171.14(b)(3) requiring conversion to the new hazard communication system for most materials by October 1, 1993, troubled a number of petitioners. Four petitioners wanted to eliminate the two-year transition period for compliance with new hazard communication and classification requirements. These petitioners included the Association of American Railroads (AAR), who, along with several rail carriers, asserted that the two-year transition period specified in § 171.14(b)(3) is too long. AAR stated that two years of a mixed DOT/UN hazard communication system would confuse transportation employees, emergency responders and others, and could impair transportation system safety. AAR recommended a six-month effective date (until June 21, 1991) to implement classification and hazard communication regulations. However, one rail carrier supported the two-year transition for marking and labeling of non-bulk packages.

Nine petitioners, including the American Trucking Association (ATA), asked RSPA to revise § 171.14(b)(3) to allow more time for conversion to the new hazard communication system given the great number of hazardous products involved and high short-term conversion costs. Several petitioners said it will be "very difficult" to fully coordinate the complete changeover to the new system. They urged RSPA to require consistency in the application of a hazard communication system over the transition period.

#### *Transition Period for Materials Poisonous by Inhalation*

Manufacturers of ethylene oxide and ethylene oxide mixtures, among other petitioners, urged RSPA to extend the effective date of this rulemaking from October 1, 1991, to at least October 1, 1992. They said the provisions in § 171.14(a)(3), requiring materials poisonous by inhalation to comply with the new hazard communication and classification criteria by October 1, 1991, will affect thousands of reusable drums in dedicated service. One petitioner explained that the turnaround time for drums is often two to three months and often up to 12 months for cylinders of ethylene oxide mixtures. The petitioners stated that "it is unreasonable to expect customers at well over 5,000 locations to make changes to the markings on returnable packages in the timeframe allowed." The Ethylene Oxide Industry (EOI) Association added that shippers need more time to comply with new

hazard communication requirements because new data may affect the classification of this material. EOI stated "workers also need to be trained in the new requirements and shippers need to locate carriers with sufficient liability insurance to carry (materials poisonous by inhalation)."

#### *Packagings Prepared/Filled Prior to October 1, 1991*

Other petitioners averred that it will take at least two years to review data for the reclassification of product inventory, to redesign and produce new packaging, and to re-mark existing packagings. The Compressed Gas Association recommended an exception to § 171.14(a)(3), stating that a container which has been charged and shipped prior to October 1, 1991, may be returned to the supplier bearing its original markings and labels provided it is shipped under the description, "Residue last contained."

#### *Transition Period for New Explosives*

For new explosives, one petitioner recommended that existing DOT placards be used exclusively until October 1, 1993, on all vehicles transporting explosives. The petitioner stated "to require otherwise would raise serious safety considerations given, for example, that DOT's 1990 edition of the Emergency Response Guidebook does not show UN numbers for explosives nor UN proper shipping names." Another petitioner claimed that RSPA's decision not to permit mixing of DOT and UN hazard communication systems "will result in a significant burden to the explosives industry."

#### *Transition Period for Conversion to New Placarding System*

Several motor carriers stated there is no demonstrated need to change the DOT placarding system by October 1, 1993, adding that "the expense (of complying with new placarding requirements by October 1, 1993) is not justified by the safety benefits gained." They said continued use of existing DOT placards should cause no confusion to emergency responders or enforcement personnel over a five-year transition period. Carriers recommended delaying the placarding provisions in § 171.14(b)(3) until a rulemaking on improvements to the placarding system (mandated by the Hazardous Materials Transportation Uniform Safety Act of 1990) is completed. They stated "otherwise, carriers would be forced to undergo the cost of making two regulatory adjustments." One carrier asked RSPA to revise § 171.14(b)(3) to

Permit trailers now equipped with permanently affixed placards to remain in use without the hazard class numbers until November 30, 1998.

#### RSPA Response to Petitions

RSPA is sympathetic to the concerns of AAR and other petitioners that a mixed DOT/UN hazard communication system will create confusion if the two-year transition period for hazard communication requirements is not shortened. However, RSPA believes that a two-year transition period for most hazard communication and classification requirements is necessary to allow sufficient time for persons to familiarize themselves with the new requirements and, for example, make the necessary revisions to shipping paper descriptions in computer databases, remark and relabel packages, and train employees.

On the other hand, RSPA does not believe that the two-year transition period for hazard communication and classification requirements should be extended. For most provisions of the final rule, RSPA has determined that a two-year transition period (until October 1, 1993) is sufficient for converting to the new regulatory scheme. However, RSPA realizes that some transition period adjustments are needed to accommodate special circumstances such as those associated with the transport of materials poisonous by inhalation, conversion to the new placarding system, and transport of certain quantities of infectious substances. Consequently, RSPA is extending the effective dates of the new requirements for descriptions on shipping papers (except as addressed in the following paragraph), product marking, labeling and vehicle placarding from October 1, 1991, to October 1, 1992, for all materials meeting the poisonous by inhalation criteria. The transition period for packaging requirements for these materials remains unchanged and is effective on October 1, 1993. The effective date for conversion to the new placarding system for the transport of all materials, except materials poisonous by inhalation, has been extended from October 1, 1993, to October 1, 1994, based on the merits of petitions. RSPA is also extending the "50 ml exception" for cultures of infectious substances (etiologic agents) for one year, until October 1, 1992.

RSPA is still requiring gases and liquids poisonous by inhalation to be classified as of October 1, 1991. In addition, by that date, the words "Poison-Inhalation Hazard" or "Inhalation Hazard", as appropriate, must be entered on shipping papers, as

required in § 172.203(m), for gases meeting the definition for poisonous by inhalation in § 173.115(c), which includes materials assigned Special Provision 13 in Column 7 of the § 172.101 Table. Liquids poisonous by inhalation are already subject to the hazard communication requirements for materials poisonous by inhalation.

One petitioner asked RSPA to clarify that, for anhydrous ammonia, Special Provision 13 in § 172.102 requiring the words "Inhalation Hazard" on shipping papers and package markings will not be effective until October 1, 1993. This petitioner is mistaken. Although anhydrous ammonia is classified in the § 172.101 Table as a Division 2.2 non-flammable gas domestically, it meets criteria in § 173.115(c) for Division 2.3 gases poisonous by inhalation and is subject to the same transitional provisions. Therefore, in this final rule it is made clear that for anhydrous ammonia, the requirement to enter the words "Inhalation Hazard" on shipping papers is effective October 1, 1991. The words "Inhalation Hazard" must be marked on packages containing anhydrous ammonia by October 1, 1992.

#### Infectious Substances

The definition and packaging provisions for infectious substances (etiologic agents) were issued in a final rule under Docket HM-142A (56 FR 197, January 3, 1991), entitled "Etiologic Agents". The final rule under Docket HM-181 expanded the provisions issued under Docket HM-142A for etiologic agents, and authorized the term "infectious substances" as synonymous with the term "etiologic agent". Although the final rule under Docket HM-142A was published subsequent to the final rule under HM-181, the intent of Docket HM-142A was to provide interim provisions for the transportation of infectious substances (etiologic agents) until the October 1, 1991, effective date under Docket HM-181. In the Docket HM-142A final rule, RSPA recommended that shippers implement the Docket HM-181 provisions as soon as practicable rather than the interim provisions contained in Docket HM-142A.

RSPA received a petition for reconsideration to Docket HM-142A that raised several issues concerning the potential impact of the final rule on the waste management industry. RSPA delayed the effective date of the final rule to September 30, 1991 (56 FR 7312), to provide more time to evaluate the petition. Because RSPA intended that the provisions of Docket HM-181 supersede those in Docket HM-142A, RSPA is incorporating Docket HM-142A

into Docket HM-181, and is extending the effective date for cultures of infectious substances (etiologic agents) of 50 ml or less total quantity per package as part of this rulemaking action. Therefore, for cultures of infectious substances (etiologic agents) of 50 ml or less total quantity in one package, hazard communication (shipping papers, marking, and labeling) and classification requirements are extended from October 1, 1991, until October 1, 1992. For infectious substances not meeting this exception, the effective date remains October 1, 1991, for hazard communication (shipping papers, marking, and labeling) and classification requirements. Further response to the petition for reconsideration of the final rule issued under Docket HM-142A will appear in a forthcoming corrections document under Docket HM-181.

#### Summary

The transitional provisions in § 171.14 are reorganized for clarity and revised as follows:

##### *Effective October 1, 1991*

New explosives must be classified, described on shipping papers, marked on packages, and labeled according to the new system. Classification criteria in § 173.115(c) are effective for gases which are poisonous by inhalation. For these gases, the words "Poison-Inhalation Hazard" or "Inhalation Hazard", as appropriate, must be entered on shipping papers, as required by either § 172.203(m) or Special Provision 13 to the § 172.101 Table. Except for cultures of infectious substances (etiologic agents) of 50 ml or less total quantity in one package (the "50 ml exception"), revised hazard communication (shipping papers, marking, and labeling) and classification requirements are effective for infectious substances. Infectious substances (etiologic agents) currently excepted under the "50 ml exception" in § 173.386(d)(3) are granted a one-year extension of the effective date, until October 1, 1992.

##### *Effective October 1, 1992*

Revised hazard communication requirements (i.e., descriptions on shipping papers, package marking, labeling, and vehicle placarding) are effective for all materials meeting the criteria for poisonous by inhalation, including those assigned Special Provision 13 in column 7 of the § 172.101 table. Also, revised hazard communication (shipping papers, marking, and labeling) and classification requirements are effective for cultures of

infectious substances (etiologic agents) of 50 ml or less total quantity in one package.

*Effective October 1, 1993*

Except for placarding, compliance with new classification and hazard communication requirements is required for all other hazard materials. Packaging requirements are effective for all materials meeting the criteria of poisonous by inhalation. Modal requirements are effective, and hazardous materials must be loaded and segregated as required in §§ 174.81 and 177.848 for transportation by rail car and motor vehicle, respectively.

*Effective October 1, 1994*

Non-bulk packagings are required to be manufactured in compliance with UN performance standards. Also, conversion to the new placarding system is required for the transport of all hazardous materials except materials poisonous by inhalation (for which placarding requirements are effective October 1, 1992).

*Effective October 1, 1996*

DOT specification packagings rendered obsolete by the December 21, 1990, final rule may no longer be used.

Other transitional provisions are established in § 171.14(c). Paragraph (c)(1) allows packages filled with hazardous materials before October 1, 1991, to (1) retain original markings and labeling; and (2) not comply with the UN packaging standards if these packages are transported prior to October 1, 2001. However, as of October 1, 1992, the "Inhalation Hazard" marking specified in § 172.313(a) must be applied to packages filled with materials meeting the criteria of poisonous by inhalation. Until October 1, 1994, carriers may use either new "UN-based" or old placards, as indicated in the placard substitution table provided in paragraph (c)(2). RSPA sets forth "mix and match" guidelines in § 171.14(c)(3) for operating within a dual system during the various transition periods.

#### *Applicability*

The provision in § 172.101(l)(1)(ii), which allows stocks of preprinted shipping papers and package markings to continue in use until depleted or up to one year from the effective date, whichever is less, does not apply as an additional one-year extension of the effective dates contained in this rule.

#### **Administrative Notices**

##### *A. Executive Order 12291*

This final rule has been reviewed under the criteria specified in section

1(b) of Executive Order 12291 and is determined not to be a major rule. However, it is a significant rule under the regulatory procedures of the Department of Transportation (44 FR 11034). This rule does not require a Regulatory Impact Analysis, or an environmental impact statement under the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*) This final rule does not impose additional requirements and has the net result of reducing costs imposed under the final rule published in the Federal Register on December 21, 1990, without reducing safety (55 FR 52402). The original regulatory evaluation of the final rule was not modified because the changes made under this rule will result in minimal economic impact on industry.

##### *B. Executive Order 12612*

This action has been analyzed in accordance with Executive Order 12612 ("Federalism"). It has no substantial direct effect of the States, on the current Federal-State relationship, or the current distribution of power and responsibilities among levels of government. Thus this final rule contains no policies that have Federalism implications, as defined in Executive Order 12612, and no Federalism Assessment is required.

##### *C. Impact on Small Entities*

Based on limited information concerning size and nature of entities likely to be affected by this rule, I certify this rule will not have a significant economic impact on a substantial number of entities under the criteria of the Regulatory Flexibility Act. A regulatory flexibility analysis is available for review in the docket.

##### *D. Paperwork Reduction Act*

This amendment imposes no changes to the information collection and recordkeeping requirements contained in the December 21, 1990 final rule, which was approved by the Office of Management and Budget (OMB) under the provisions of 44 U.S.C. chapter 35.

##### *E. Regulatory Information Number (RIN)*

A regulatory information number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN number contained in the heading of this document can be used to cross-reference this action with the Unified Agenda.

#### **List of Subjects in 49 CFR Part 171**

Exports, Hazardous materials transportation, Hazardous waste, Imports, Incorporation by reference, Reporting and recordkeeping requirements.

In consideration of the foregoing, 49 CFR part 171, as amended in the final rule published December 21, 1990 (55 FR 52402), is further amended as follows:

#### **PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS**

1. The authority citation for part 171 is revised to read as follows:

Authority: 49 App. U.S.C. 1802, 1803, 1804, 1805, 1808, 1818; 49 CFR Part 1.

2. Section 171.14, as revised on page 52473, is revised to read as follows:

##### **§ 171.14 Transitional provisions for implementing requirements based on the UN Recommendations.**

(a) *Purpose and scope.* A rule published in the Federal Register on December 21, 1990, effective October 1, 1991, resulted in a comprehensive revision of this subchapter based on the UN Recommendations. The purpose of the provisions of this section is to provide an orderly transition to the new requirements, so as to minimize any burdens associated with them. During a transition period as provided herein, persons may elect to comply with either the applicable old requirements of this subchapter in effect on September 30, 1991, or the new requirements of this subchapter appearing in the December 21, 1990 rule, and the rule published in the Federal Register on September 18, 1991, effective October 1, 1991.

(b) *Transition dates:* The following transition dates apply only to the new requirements in the December 21, 1990 rule:

(1) *October 1, 1991.* On October 1, 1991, the following requirements are effective:

(i) For new explosives, the hazard classification procedures as set forth in subpart C of part 173 (for explosives) of this subchapter and, except for vehicle placarding, hazard communication requirements (i.e., shipping papers, emergency response information, package markings, and labeling) as set forth in part 172 of this subchapter.

(ii) The classification of materials poisonous by inhalation meeting the criteria of Division 2.3 (see § 173.115(c) of this subchapter), which includes materials assigned Special Provision 13 in column 7 of the § 172.101 table; Division 6.1 (see § 173.133(a) of this subchapter); or are otherwise identified as poisonous by inhalation through a

special provision in column 7 of the § 172.101 table. For such materials, the words "Poison-Inhalation Hazard" or "Inhalation Hazard" as required by § 172.203(m) or by Special Provision 13, as appropriate, shall be entered on shipping papers in association with the basic description.

(iii) For infectious substances, except for cultures of infectious substances (etiologic agents) of 50 ml (1.666 fluid ounces) or less total quantity in one package, the hazard classification procedures as set forth in § 173.134 of this subchapter and, except for vehicle placarding, hazard communication requirements (i.e., shipping papers, emergency response information, package markings, and labeling) as set forth in part 172 of this subchapter. (For cultures of infectious substances (etiologic agents) of 50 ml or less total quantity in one package, see paragraph (b)(2)(ii) of this section.)

(2) *October 1, 1992.* On October 1, 1992, the following requirements are effective:

(i) Hazard communication requirements of part 172 of this subchapter (including placarding requirements of subpart F of part 172 of this subchapter) for all materials poisonous by inhalation, which includes materials meeting the criteria in §§ 173.115(c) and 173.133(a) of this subchapter or materials otherwise identified as poisonous by inhalation through a special provision (or assigned Special Provision 13) in column 7 of the § 172.101 table.

(ii) For cultures of infectious substances (etiologic agents) of 50 ml (1.666 fluid ounces) or less total quantity in one package, the hazard classification procedures as set forth in § 173.134 of this subchapter and, except for vehicle placarding, hazard communication requirements (i.e., shipping papers, emergency response information, package markings, and labeling) as set forth in part 172 of this subchapter.

(3) *October 1, 1993.* On October 1, 1993, the following requirements are effective:

(i) Classification and hazard communication requirements in part 172 of this subchapter, other than subpart F (placarding), and part 173 of this subchapter, that were not previously in effect;

(ii) Packaging requirements for all materials meeting the criteria for poisonous by inhalation;

(iii) Modal segregation requirements in §§ 174.81 and 177.848 of this subchapter; and

(iv) All other requirements of the December 21, 1990, rule for which a

lengthier transition period is not provided elsewhere in this section.

(4) *October 1, 1994.* On October 1, 1994, the following are effective:

(i) Placarding requirements in subpart F of part 172 of this subchapter that were not previously in effect; and

(ii) Package manufacturing and marking requirements under the provisions of subpart B of 173, subparts A, B, D, E, F, and G of part 178, and part 179 of this subchapter. (DOT specification packagings removed from part 178 of this subchapter by the December 21, 1990, rule may no longer be manufactured.)

(5) *October 1, 1996.* On October 1, 1996, requirements in parts 172 and 173 of this subchapter for maintenance and use of packagings that were not previously in effect are effective. (DOT specification packagings removed from part 178 of this subchapter by the December 21, 1990, rule and packaging authorizations removed from part 173 of this subchapter by the December 21, 1990, rule may no longer be used in place of new packaging requirements.)

(c) *Other transitional provisions—(1) Packages filled prior to October 1, 1991.* Notwithstanding the marking and labeling provisions of subparts D and E, respectively, of part 172, and the packaging provisions of part 173 and subpart B of Part 172 of this subchapter, a package may be offered for transportation and transported prior to October 1, 2001, if it—

(i) Conforms to the old requirements of this subchapter in effect on September 30, 1991;

(ii) Is filled with hazardous materials prior to October 1, 1991;

(iii) Is marked "Inhalation Hazard", if appropriate, in accordance with § 172.313 of this subchapter or Special Provision 13, as assigned in the § 172.101 table; and

(iv) Is not emptied and refilled on or after October 1, 1991.

(2) *Transitional placarding provisions.* Until October 1, 1994, placards which conform to specifications for placards in effect on September 30, 1991, may be used in place of the placards specified in subpart F of part 172 of this subchapter, in accordance with the following table:

PLACARD SUBSTITUTION TABLE

Hazard class or division No.	Current placard name	Old (Sept. 30, 1991) placard name
DIVISION 1.1 ...	EXPLOSIVES 1.1.	EXPLOSIVES A.
DIVISION 1.2 ...	EXPLOSIVES 1.2.	EXPLOSIVES A.
DIVISION 1.3 ...	EXPLOSIVES 1.3.	EXPLOSIVES B.

PLACARD SUBSTITUTION TABLE—  
Continued

Hazard class or division No.	Current placard name	Old (Sept. 30, 1991) placard name
DIVISION 1.4 ...	EXPLOSIVES 1.4.	DANGEROUS.
DIVISION 1.5 ...	EXPLOSIVES 1.5.	BLASTING AGENTS.
DIVISION 1.6 ...	EXPLOSIVES 1.6.	DANGEROUS.
DIVISION 2.1 ...	FLAMMABLE GAS.	FLAMMABLE GAS.
DIVISION 2.2 ...	NONFLAMMABLE GAS.	NONFLAMMABLE GAS.
DIVISION 2.3 ...	POISON GAS.	POISON GAS.
CLASS 3 ...	FLAMMABLE.	FLAMMABLE.
COMBUSTIBLE LIQUID.	COMBUSTIBLE.	COMBUSTIBLE.
DIVISION 4.1 ...	FLAMMABLE SOLID.	FLAMMABLE SOLID.
DIVISION 4.2 ...	SPONTANEOUSLY COMBUSTIBLE.	FLAMMABLE SOLID.
DIVISION 4.3 ...	DANGEROUS WHEN WET.	FLAMMABLE SOLID W.
DIVISION 5.1 ...	OXIDIZER.	OXIDIZER.
DIVISION 5.2 ...	ORGANIC PEROXIDE.	ORGANIC PEROXIDE.
DIVISION 6.1, PG I and II.	POISON.	POISON.
DIVISION 6.1, PG III.	KEEP AWAY FROM FOOD.	(None required.)
CLASS 7 ...	RADIOACTIVE.	RADIOACTIVE.
CLASS 8 ...	CORROSIVE.	CORROSIVE.
CLASS 9 ...	CLASS 9.	(None required.)

(3) *Intermixing old and new requirements.* During the transition periods provided in paragraph (b) of this section, it is recommended that hazard communication requirements be consistent where practicable, i.e., marking, labeling, placarding, and shipping paper descriptions should conform to either the old requirements of this subchapter in effect on September 30, 1991, or new requirements of this subchapter added or revised by the December 21, 1990, rule, without intermixing of communication elements. However, intermixing is permitted, during the applicable transition periods, for packaging, hazard communication, and handling provisions, as follows:

(i) A package may be manufactured to the old requirements of this subchapter in effect on September 30, 1991 (e.g., a DOT 17E drum) even if marked and labeled for the hazardous material contained therein under the new requirements of this subchapter appearing in the December 21, 1990 rule:

(ii) A package may be manufactured to the new requirements of this subchapter appearing in the December 21, 1990 rule (e.g., a UN 4G box) even if marked and labeled for the hazardous material contained therein under the old requirements of this subchapter in effect on September 30, 1991;

(iii) If either shipping names or identification numbers are identical, a shipping paper may display the old shipping description even if the package is marked and labeled under the new shipping description;

(iv) If either shipping names or identification numbers are identical, a shipping paper may display the new shipping description even if the package is marked and labeled under the old shipping description;

(v) Either old or new placards may be used during the appropriate placarding transition period regardless of whether old or new shipping descriptions and package markings are used; and

(vi) Either old or new handling requirements, including segregation and stowage, may be used during the applicable transition period (see paragraph (b)(3) of this section).

Issued in Washington, DC, on September 11, 1991 under authority delegated in 49 CFR part 1.

Travis P. Dungan,

*Administrator, Research and Special Programs Administration.*

[FR Doc. 22220 Filed 9-17-91; 8:45 am]

BILLING CODE 4910-60-M